Meeting of the Decommissioning Community Workgroup (#13)
Wednesday, October 16, 2002
Perkins High School

The meeting began at 5:30 p.m. Present were the following Workgroup members: Janet and Mark Bohne, Chris Gasteier, Bob Speers, Lana Wood, Rick Graham, Stan Taylor, David Stein and Ralph Roshong. Also present were Tim Polich, Sally Harrington, Frank Greco, Mike Blotzer, Manny Dominguez, Kurt Geber, (NASA), Hank Bayes (Argonne National Labs), Sheryl Leeper, Wes Watson (USACE), Donald McGee, Peter Huntley (Framatome), Bobby Cooper (MWH), Susan Santos, Michael Morgan, Anne Chabot (FOCUS GROUP).

Decommissioning Project Manager Tim Polich began the meeting with welcoming remarks and introductions.

Decommissioning Update

Tim briefly reviewed progress since the July Workgroup meeting. He began with an update on the Technical Basis Document mentioned the last time the Workgroup met. According to Tim they hadn't proceeded with the work originally planned because "we had to make sure we didn't have any problems with internal dosimetry". He said that safety was the driving force and it was necessary to get that document and procedures in place before work started. It is in place now. Next, Tim reported that Sheryl Leeper, (Environmental Engineer with USACE) contacted the Ohio EPA regarding a change in the regulations governing mixed waste – clarifying whether the project must follow NRC or U.S. EPA regulations. NASA received a letter from Ohio EPA giving conditional use of NRC regulations until the time Ohio EPA issues further requirements.

Tim reported that crews had removed piping from the cryogenic trench in preparation for installation of the cask transfer system. He also described the shrapnel shield lift. The first attempt to lift a shrapnel shield was stopped when the Polar Crane load limit (20 tons) was approached. The load was set back down and NASA safety professionals were contacted. He said, "This caused us to lose some time, but safety is the main concern and when we felt our predictions were off we set it back down and researched what was it going to take to move forward." After looking at options, the NASA Safety Office provided the necessary assistance to go forward. The three shrapnel shields were all lifted successfully and each shield was within the 20-ton load capacity of the Polar Crane. After the first two shrapnel shields were lifted and set aside in the storage location in the containment vessel, the third shield was lifted to measure actual radiation readings and then placed back over the reactor tank. The radiation levels obtained by measurement were within the range calculated and analyzed and were in fact "at low end of our predicted values."

Next, Tim reported that they had completed walk-downs and tag-outs for the containment ventilation system, which will keep negative pressure on the containment vessel. He went on to say that loose equipment had been removed from the northwest corner of the reactor building, and that work is nearly completed on the sampling to closeout a few

open data gaps that had been identified in the Environmental Baseline Survey (mentioned at previous meetings). Some sampling began this month and should be completed by the end of December/early next year. He concluded by reporting that an Operational Readiness Review (ORR) is scheduled for late in November to assess the readiness for proceeding with segmentation. The contractor (WACHS) is scheduled to bring in equipment in early January, to begin testing in late January, and start segmentation in late February.

Susan Santos of FOCUS GROUP asked for and received Workgroup acceptance of the July meeting minutes. She then reviewed the October meeting agenda and introduced the next speaker.

Waste Handling and Disposal Options

Sheryl Leeper, USACE Environmental Engineer on the project, began her presentation describing the four kinds of waste present at the Reactor Facility, which includes 1) low-level radioactive waste (LLRW), 2) hazardous and universal wastes including asbestos, asbestos tiles, PCB ballasts, lead batteries, and fluorescent light tubes, 3) mixed waste, which is a combination of hazardous waste and a radioactive component, radioactive lead-based paint for example, and 4) non-radioactive and non-hazardous waste.

Sheryl described the four types of waste in more detail. Radioactive components are characterized, to determine what isotopes are present and the levels of each of the isotopes present Characterization is performed through surveys including the use of hand-held meters, through physical means such as by smears or wipe samples, or by collecting little pieces of a substrate for offsite analysis. The characterization is used to classify waste for disposal under the NRC classifications – Class A, Class B, and Class C. The waste is also classified according to Department of Transportation (DOT) shipping categories (separate from NRC disposal classifications) as non-radioactive, limited quantity, LSA (low specific activity), Type A and Type B.

Hazardous waste is defined by RCRA (Resource Conservation and Recovery Act) in terms of specific characteristics (toxicity, ignitable, reactivity or corrosively) or as a "Listed Waste" which is considered inherently toxic due to processes or waste streams.

Universal wastes also need to be identified so that they can be properly disposed.

Mixed waste has both radioactive and hazardous waste properties and must be treated to deal with the hazardous component then properly disposed as a radioactive waste.

Non-hazardous waste and non-radioactive wastes also exist onsite. These wastes that pose no hazardous or radioactive threat can be handled as solid waste.

Sheryl then described disposal options. For radioactive waste, there are two direct disposal sites – Barnwell in South Carolina accepts LLRW Class A, B, C. Envirocare in Clive, Utah is available but they only accept LLRW Class A. "We can also look at treatment and disposal options for mixed waste issues – i.e., encapsulate radioactive lead-

based paint prior to disposal," she said. Sheryl noted there are three waste processors that can deal with the types of low-level wastes at the Reactor Facility – Alaron in Pennsylvania, (which is where our first shipment went last year), Duratek and US Ecology in Tennessee. These processors have the expertise to handle LLRW in a number of ways: 1) decontamination processes that remove the radioactive component from the object, 2) repackaging, or 3) volume reduction. Sheryl noted that when disposing or radioactive waste in a burial landfill, cost is based on volume.

Therefore, the smaller the volume the less expensive it is. Sheryl mentioned that these processors may also be able to "release" some of the waste that we are not able to readily release from the site. These materials may be non-hazardous and non-radioactive, and some of the processors have better capabilities to evaluate/characterize the waste through more sophisticated characterization equipment than we can onsite. Sheryl also mentioned some disposal options for other types of wastes. Hazardous and universal wastes will be shipped along with the existing NASA Plum Brook Station process, and local licensed landfills are being researched for non-hazardous and non-radioactive components.

Sheryl then briefly described options for packaging, which include strong, tight containers." Examples given of strong tight containers included B-25 boxes, SeaLand containers which are usually seen on semi-trucks or stacked on a rail cars, intermodals or gondola cars (used for shipping by rail), super sacks (large, industrial strength, woven textile bags), large components on flatbed trucks, and - depending on the level of radioactivity - casks. She showed a slide of a Type B cask, noting that components are placed inside a liner inside the cask to shield radioactivity from getting outside. The bulk of the container is for protection.

Next Sheryl described the options for decommissioning work itself: "How are we are going to take the place apart." The options include sending all materials to an offsite disposal facility, ship materials to a waste processor for sorting, segregation, volume reduction, etc. then disposal, or segregation onsite then offsite disposal. She reported that this project would probably use a combination of methods and that currently "we are doing research to look at different vendors' capabilities and what they can do for us." A request for proposal (RFP) is being developed to get specific pricing in a formalized manner. When that is received, they will do engineering evaluations that will consider cost, schedule, safety and risks. In the end, they will "formulate an efficient and effective solution for disposal," she concluded.

Janet Bohne asked for clarification on what "release" meant. Wes Watson mentioned that he took a trip to Alaron about a year ago and said that they have micro-detectors and micro- decontamination capabilities. Tim Polich added that we don't want to get into the waste processing business, but we also don't want to put large volumes of things into landfills that don't need to go in. Tim also added, "we don't want to waste time scabbling, decontaminating, and surveying materials when there are facilities that handle those aspects". Rick Graham added, "In short, it's got to be cheaper than taking up space; they remove the radiation, recycle the materials and environmentally it's better."

Community Outreach

Susan Santos (FOCUS GROUP) presented an overview of the Erie County focus groups conducted this summer - a qualitative evaluation of community outreach efforts to date. Susan stated that when community outreach began in 1999, a series of 25 –30 community interviews were conducted with residents, NASA retirees and current employees to discuss questions, concerns and perceptions, which culminated in forming the Decommissioning Project Community Relations Plan. The plan is dynamic and has included taking Workgroup suggestions on how to get the word out more, adding the Telephone Info Line, for example. Susan added that after doing all of the outreach, "we wanted to know how aware are people?" A series of four focus groups were conducted to evaluate the following: How aware are people about the decommissioning project? What are their perceptions, questions, and concerns about it? How do they respond to information? Is it too technical or too simplified, is it hitting the right mark? What's the best way to reach them? Where do they get the information? Whom do they trust?

Susan reported that focus groups are essentially a facilitated group discussion to see how people respond to the discussion and to see how opinions are formed. She briefly described the steps involved. Focus groups are widely used for market research and program evaluation purposes. An experienced subcontractor randomly recruited people by telephone. They asked some screening questions to meet the minimal eligibility criteria. For example, NASA employees or NASA subcontractors, or those working in the nuclear industry were excluded because in the mix with the general public they might be perceived as experts and may sway the discussion. The goal was to get participants at least age 21 and a general mix of age, gender, and education. Focus groups were held on August 20 and 21, at the Holiday Inn at Sandusky. Susan and another facilitator worked from a prepared discussion guide that started with broad open-ended questions that get narrower in focus. "It seems like a free-flowing conversation but is really very structured," said Susan. They didn't reveal who was doing the research because they didn't want participants to research the topic beforehand. Participants had been invited to join focus groups on "issues of community interest" and were offered a monetary incentive, which is standard practice. Thirty-four respondents participated. The target audience was originally the "near neighbors" (within ½ mile) but recruiters couldn't get enough participants, so the first group was expanded to 2-mile radius. The second group was from Sandusky. The third group was from Huron and Huron Township. The fourth group was from Milan, Berlin and Oxford Township. Six of the participants were on NASA's mailing list.

Results from the local issues discussion showed "top of mind" issues were about infrastructure, taxes, education, and some environmental, but not a groundswell of environmental concern. NASA Plum Brook Station or decommissioning was not "top of mind". Davis-Besse was mentioned in 3 or 4 groups as very "top of mind". All groups were aware of NASA as a neighbor though they were not very knowledgeable about it. People referred to PBS as "being decommissioned", "closed except for the ordnance factory", and "they sold it". There was no negative perception of NASA. The facilitators asked the groups to grade NASA, as a neighbor, in concern for safety of workers, how

much do they follow environmental regulations, and how good they were about giving out information. Most people gave a "neutral grade", C average, but most "didn't know enough." Twenty-five percent knew about the decommissioning – from getting information in the mail, the open house, and a speaker at a civic meeting, etc. Most rely on "getting their information from family and friends." The facilitators then gave participants various community outreach/education materials to read. There was favorable response to visual appearance/identity of materials. People wanted different levels of detail, different preferences for style. They could retain information better from the material that had more "narrative style' according to Susan.

Susan briefly reported on key findings (a final report will be submitted to NASA). Participants wanted to know: What is there (at the Reactor Facility site) and where is it? If the fuel is gone, where is the radiation? Who measures? What's low-level mean? What is natural background? What happens if there's a spill? Susan pointed out that people's concern was different from a couple of years ago due to 9/11 – instead of "What are the environmental impacts?" their concern was, "Does NASA have an emergency plan?" In terms of the best ways to get them information, participants wanted passive and active ways – i.e., ability to go to the Website and by direct mail; they also wanted regular updates. Overall, participants were "glad that NASA is telling people." In reaction to NASA's current outreach efforts, they liked the magnet. They also liked the Website but felt it should be regularly updated - and include the ability for visitors to leave a question online and get back a response. They "loved the idea of a Community Workgroup". Many knew of current members but only one person knew an individual was actually part of the Workgroup and had talked to him/her about decommissioning. Susan added that given the positive response to the Workgroup, it is important to encourage members to actively engage in dialogue with neighbors about the decommissioning project. Rick Graham said, "After the article (newspaper supplement) appeared I had four people at our church that wanted to talk about it, and then two neighbors. Having the workgroup names listed helps but if you go out and try to start a conversation about it, they say they don't have time for it."

Susan reported that participants liked the quarterly decommissioning newsletter, but had low initiative to come to meetings. In terms of what else NASA should do, Susan reported they urged NASA to do more with the schools. "If you get the information in my kid's lunchbox, I'll see it," they said. Susan thanked Perkins High School Principal Chris Gasteier for his support in contacting heads of PTAs, attempting to get their membership lists. Susan reported that the focus groups suggested NASA should have more open houses, and use "a billboard on Route 250 like the quarry does". They wanted direct mail to their homes, more editorials, stories and creative ways to get information to local media. They liked the Telephone Information Line but felt it was most valuable "if something went wrong." Susan said that they wanted multiple methods, multiple channels, layered information that was simple, narrative, and also technical but doesn't mean they'll avail themselves of it. She said that external factors can affect people's perception (like Davis-Besse) and can impact their level of concern. She found that "NASA is relatively trusted and that grades for NASA went up at end of sessions." Susan said that they still want independent sources for their information and mentioned the

Community Workgroup "is a trusted independent source that they would turn to because they know you. They want you to ask the tough questions, to be critical and skeptical and then they want to know about it." She concluded by saying that the community outreach team would be looking at ways to make the Workgroup's role more visible in the update of the Community Relations Plan.

Mark Bohne commented that he liked hearing Tim and Keith's interview on the radio and he suggested that when the project managers go out, maybe they could invite one or more workgroup members to go out with them. "If you're going to the Kiwanis Club, drag one of us along and we can be introduced as Community Workgroup members because while people may be afraid of talking with the project manager they may feel more inclined to have a discussion with us." Susan added that she has experienced this with another project. At times, she said, the members have hosted a meeting at their organizations and invited speakers to it. Mark added that he thinks it enhances their credibility. Another Workgroup member, Rick Graham said, "I think if someone's offering to write an editorial, I would feel comfortable putting my name on it."

Susan mentioned that people suggested bringing exhibits to libraries, schools, and malls. Chris Gasteier suggested that Perkins High School is hosting a PTO Fair scheduled for early March 2003 where several thousand people will attend. He offered a space where information can be displayed. Chris offered to publicize that NASA would be present through his and other schools' monthly newsletters. Lana Wood suggested that we urge parents to ask administrations for help in getting the word out. Mark suggested that NASA should include NASA's environmental initiatives in regular presentations to the public and other meetings. Mike Blotzer, Chief of Environmental Management at Glenn Research Center introduced himself and talked about some of the projects he's involved with including pollution prevention, the Reactor Facility historical documentary, a habitat research project at PBS and an environmental bus. Mike explained the habitat research survey and the number of habitats and wildlife that make PBS its home. He suggested that this presentation be made at future Workgroup meetings. Frank Greco added that NASA has a broader education package that goes into schools – there's an infrastructure already set up to disseminate educational materials. Mike added that the video documentary will be finished in January 2003 and will be introduced into local classrooms.

Susan announced that the January Workgroup is scheduled for Tuesday, 1/28/03 at location to be announced. The topics tentatively scheduled include a presentation on segmentation (WACHs), and an update on environmental monitoring. For future meetings, the list of possible topics includes pollution prevention, showing the historical documentary, and a report on the updated Community Relations Plan. Susan reported that the newsletter went out and there are two new fact sheets and lots of new displays with more in-depth information. Susan encouraged the group to start conversations with people coming to the CIS. Susan announced that Sally Harrington would be giving an updated PowerPoint presentation (Decommissioning Project overview) later in the evening.
The meeting adjourned at just before 7 p.m.